For example, the virtual reflection 130 may be based on a series of images which are found in video acquired by the rear-facing camera 106.

Those having ordinary skill in the art will readily recognize that certain steps or operations illustrated in the figures above can be eliminated or taken in an alternate order. Moreover, the methods described above may be implemented as one or more software programs for a computer system and are encoded in a computer readable storage medium as instructions executable on one or more processors.

The computer readable storage medium can be any one of an electronic storage medium, a magnetic storage medium, an optical storage medium, a quantum storage medium and so forth. Separate instances of these programs can be executed on or distributed across separate computer systems. Thus, although certain steps have been described as being performed by certain devices, software programs, processes, or entities, this need not be the case and a variety of alternative implementations will be understood by those having ordinary skill in the art.

Additionally, those having ordinary skill in the art readily recognize that the techniques described above can be utilized in a variety of devices, environments and situations.

Although the present disclosure is written with respect to specific embodiments and implementations, various changes and modifications may be suggested to one skilled in the art and it is intended that the present disclosure encompass such changes and modifications that fall within the scope of the appended claims.

What is claimed is:

1. A device comprising:
a front-facing camera;
a rear-facing camera;
a display;
one or more memories storing computer-executable instructions; and
at least one processor configured to execute the computer-executable instructions to:
acquire a first image of a background using the rear-facing camera;
acquire a second image of an actual object using the front-facing camera;
access a third image of an item from the one or more memories, the item including a reflective surface;
determine, based on the second image, an actual orientation of the actual object;
determine, in response to the actual orientation of the actual object, an orientation of the item that corresponds to the actual orientation of the actual object, the orientation of the item configured to cause the item to appear engaged to the actual object;
determine, in response to the orientation of the item, an orientation of the reflective surface;
in response to the orientation of the reflective surface, select a portion of the background from the first image, the portion of the background configured to cause the portion to appear as a reflection in the reflected surface of the item;
generate a fourth image, wherein the fourth image includes the portion of the background and does not include the actual object;
generate an augmented image that includes:
the actual object positioned in the actual orientation;
the item positioned in the orientation and engaged with the actual object; and

the fourth image positioned in association with the reflective surface of the item; and
present the augmented image on the display.

2. The device of claim 1, the device further comprising:
a three-dimensional sensor device;
the computer executable-instructions further comprising instructions to:
acquire unordered point cloud data descriptive of at least a portion of the actual object using the three-dimensional sensor device; and
wherein the determining of the actual orientation is based at least in part on the unordered point cloud data.

3. The device of claim 1, the computer-executable instructions further comprising instructions to:
access a fifth image stored in the one or more memories, the fifth image including a representation of the device that comprises the display; and
display at least a portion of the representation of the device in association with the reflective surface in addition to the portion of the background to cause the reflection to further include the at least a portion of the representation of the device.

4. The device of claim 1, the computer-executable instructions further comprising instructions to:
determine, based on the second image, a position of the actual object with respect to the device, the position associated with a front side of the device; and
based on the position, perform a function to invert, flip, or invert and flip the portion of the background, wherein the augmented image includes the portion of the background in an inverted, flipped, or inverted and flipped position.

5. The device of claim 1, the computer-executable instructions further comprising instructions to:
determine movement of the actual object relative to the device; and
in response to the movement of the actual object, modify the augmented image by:
modifying a position of the actual object within the augmented image based at least partially on the movement of the actual object relative to the device;
determining a moved orientation of the actual object;
in response to the moved orientation, determining a corresponding orientation of the item that causes the item to appear engaged with the actual object;
modifying a position of the item within the augmented image by positioning the item in the corresponding orientation and engaged with the actual object; and
modifying a position of the portion of the background within the augmented image by positioning the portion of the background in association with the reflective surface of the item.

6. A computer-implemented method comprising:
obtaining a first image using a first camera positioned on a first side of a device, the first image including a background;
obtaining a second image using a second camera associated with a second side of the device opposite the first side, the second image including an actual object;
accessing a third image of an item, the item including a reflective surface;
determining a first position of the actual object based on the second image;
in response to the first position of the actual object, determining a second position of the item that corresponds to the first position of the actual object, the